

IN THE CLAIMS

This listing of the claims will replace all prior versions, listings, of claims in the application:

Claims 1-14 (canceled)

Claim 15 (new): A method for monitoring a measurement device having a measurement signal comprising:

calculating from a time series $s(t)$ of said measurement signal a characteristic variable for said measurement device;

comparing said characteristic variable with previously recorded reference values for said measurement device; and

using said comparison as the basis to automatically generate a message as to whether said measurement device has been installed correctly or incorrectly.

Claim 16 (new): The method of claim 15 where said measurement device is more than one measurement device and said measurement values related to each of said more than one measurement device are recorded in advance and associated on a device related basis to a respective one of said more than one measurement devices.

Claim 17 (new): The method of claim 16 further comprising automatically producing from said comparison an installation standard as said message for at least one of said more than one measurement devices and indicating said message on said at least one device.

Claim 18 (new): The method of claim 16 further comprising automatically producing from said comparison an installation standard as said message for at least one of said more than one measurement devices and transmitting said message to a higher level system where said message is indicated.

Claim 19 (new): The method of claim 16 wherein at least one of said more than one measurement devices are connected to a higher level system by a bus.

Claim 20 (new): The method of claim 15 wherein said measurement device is connected to said higher level system by a bus.

Claim 21 (new): The method of claim 15 wherein said message is generated automatically as a full text message.

Claim 22 (new): A measurement device having a measurement signal comprising:

a computing device comprising:

a device for calculating a characteristic variable from a time series of said measurement signal and comparing said characteristic variable with previously recorded reference values for said measurement device; and

a device for using said comparison as the basis to automatically generate a message as to whether said measurement device has been installed correctly or incorrectly.

Claim 23 (new): The measurement device of claim 22 further comprising a comparator for comparing said characteristic variable with previously recorded reference values for said measurement device stored in a data memory.

Claim 24 (new): The measurement device of claim 22 further comprising a display on which said message can be indicated.

Claim 25 (new): The measurement device of claim 24 wherein said display is arranged remotely from said measurement device.

Claim 26 (new): The measurement device of claim 22 wherein said device for calculating a characteristic variable and said device for using said comparison are in a single appliance.

Claim 27 (new): The measurement device of claim 26 wherein said single appliance further includes a comparator for comparing said characteristic variable with previously recorded reference values for said measurement device stored in a data memory.

Claim 28 (new): The measurement device of claim 26 wherein said single appliance further includes a display on which said message can be indicated.

Claim 29 (new): The measurement device of claim 25 wherein said device for calculating a characteristic variable, said device for using said comparison, said data memory and said display are at least partially physically separated from each and are connected to each other by an information system.

Claim 30 (new): A computer program product for monitoring a measuring device, said measurement device having a measurement signal, said computer program product comprising:

a computer readable media having instructions for causing a computer to execute a method comprising:

calculating from a time series $s(t)$ of said measurement signal a characteristic variable for said measurement device;

comparing said characteristic variable with previously recorded reference values for said measurement device; and

using said comparison as the basis to automatically generate a message as to whether said measurement device has been installed correctly or incorrectly.

Claim 31 (new): The computer program product of claim 30 wherein measurement device is more than one measurement device and said measurement values related to each of said more than one measurement device are recorded in advance and associated on a device related basis to a respective one of said more than one measurement devices and said instructions for causing a computer to execute a method further comprise automatically producing from said comparison an installation standard as said message for at least one of said more than one measurement devices and indicating said message on said at least one device.

Claim 32 (new): The computer program product of claim 30 wherein measurement device is more than one measurement device and said measurement values related to each of said more than one measurement device are recorded in advance and associated on a device related basis to a respective one of said more than one measurement devices and said instructions for causing a computer to execute a method further comprise automatically producing from said comparison an installation standard as said message for at least one of said more than one measurement devices and transmitting said message to a higher level system where said message is indicated.

Claim 33 (new): The computer program product of claim 31 wherein said instructions for causing a computer to execute a method further comprise automatically generating said message as

a full text message. .

Claim 34 (new): The computer program product of claim 32 wherein said instructions for causing a computer to execute a method further comprise automatically generating said message as a full text message.